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| U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT Assistant Secretary for Housing-Federal Housing Commissioner | Series and Series Number: (Supersedes issue dated June 6, 1994) MATERIALS RELEASE NO. 1261a |
| TO: DIRECTORS, HOUSING DIVISION DIRECTORS, MULTIFAMILY DIVISION DIRECTORS, SINGLE FAMILY DIVISION | ISSUE DATE: September 3, 1998 |
| | REVIEW DATE: September 3, 2001 |

SUBJECT: 1. Product Dricon Fire Retardant Treated Wood

2. Name and Address
of Manufacturer

Hickson Corporation
Technical Center
3941 Bonsal Road
Conley, GA 30288

Data on the nonstandard product, described herein have been reviewed by the Department of Housing and Urban Development (HUD) and determination has been made that it is considered suitable from a technical standpoint for the use indicated herein. This Release does not purport to establish a comparative quality or value rating for this product as compared to standard products normally used in the same manner.

This Materials Release cannot be used as an indication of endorsement, or approval by HUD of the described product, and any statement or representation, however made, indicating such approval or endorsement by HUD is unauthorized. See Code 18, U.S.C. 709.

Any reproduction of this Release must be in its entirety.

USE: Fire retardant treated wood for interior use.

DESCRIPTION:

The Dricon fire retardant treated wood (FRTW) consists of lumber and plywood which have been pressure impregnated with the Dricon chemicals. The Hickson Corporation produces the Dricon fire retardant chemicals which are covered by U.S. Patent 4373010. The Hickson Corporation provides the chemicals to its licensed treaters. The treating, handling, processing, kiln drying and quality control requirements are established by Hickson Corporation. Hickson Corporation is responsible for the supervision of its licensees and for the performance of the final product.

11

REQUIREMENTS:

Dricon FRTW shall meet the following requirements:

- a. All lumber and plywood shall be grademarked by an approved agency.
- b. American Wood Preservers' Association Standard C 20-93, Structural Lumber - Fire-Retardant Treatment by Pressure Processes, Interior Type A except that during kiln drying the dry bulb temperature of the kiln shall not exceed 160°F.
- c. American Wood Preservers' Association Standard C 27-93 Plywood - Fire-Retardant Treatment by Pressure Processes, Interior Type A, except that during kiln drying the dry bulb temperature of the kiln shall not exceed 160°F.
- d. Underwriters Laboratories, Inc. ULI 713 Standard Test for Surface Burning Characteristics of Building Materials Rated FR-S. (ASTM E 84 Test Method for Surface Burning Characteristics of Building Materials).
- e. Military Specifications MIL-0019140 (SH), Lumber and Plywood, Fire-retardant Treated.

DESIGN:

The design of lumber members shall be in accordance with the National Design Specification for Wood Construction, except that only the following listed species may be used and the design is subject to the strength reduction factors of Table No. 1, Strength Design Factors.

Listed Species

| | |
|---------------|-------------------|
| Douglas Fir | Spruce-Pine-Fir |
| Redwood | Spruce |
| White Pine | Ponderosa Pine |
| Hem Fir | Western Red Cedar |
| Southern Pine | White Fir |
| Red Pine | Western Hemlock |

Table No. 1

Strength Design Factors
Dricon® Fire Retardant Treated
Lumber Compared To Untreated Lumber

Applicable At Temperatures Up To 150°F

| | Listed Species | | | |
|-----------------------------------|----------------|-------------|--------|----------------------|
| | Southern Pine | Douglas Fir | Spruce | Other Listed Species |
| Compression Parallel, Fc | 0.67 | 0.65 | 0.67 | 0.65 |
| Horizontal Shear, Fv | 0.69 | 0.67 | 0.69 | 0.67 |
| Tension Parallel, Ft | 0.85 | 0.80 | 0.85 | 0.80 |
| Bending: Modulus of Elasticity, E | 0.91 | 0.91 | 0.91 | 0.91 |
| Extreme Fiber Stress, Fb | 0.80 | 0.80 | 0.80 | 0.80 |

Plywood panels shall conform to the requirements of PS 1-95 Exterior or Exposure 1. Face and back veneers shall be Yellow Pine or Douglas Fir. The minimum panel thickness for roof sheathing shall be 7/16". Panel design shall conform to Table No. 2 Dricon Plywood Span Ratings for Rated Sheathing.

Table No. 2

Dricon® Plywood Span Ratings
For Rated Sheathing

Applicable At Temperatures Up to 170°F

| Span Rating | Panel Thickness | DRICON Rating |
|-------------|-----------------|---------------|
| 24/16 | 7/16, 1/2 | 24/16 |
| 32/16 | 15/32, 1/2 | 24/16 |
| 32/16 | 5/8 | 32/16 |
| 40/20 | 5/8, 19/32 | 32/20 |
| 40/20 | 3/4, 7/8 | 40/20 |
| 48/24 | 23/32, 3/4 | 40/24 |
| 48/24 | 7/8 | 48/24 |

LIMITATIONS:

Dricon FRTW shall not be used where it will be exposed to rain, direct wetting, periodic condensation or in contact with the ground. Store Dricon FRTW off the ground and shielded from the rain.

QUALITY ASSURANCE:

All lumber and plywood shall be grade marked by an approved agency. The face and back plies of the plywood shall be Southern Pine or Douglas Fir. Hickson Corporation shall provide the chemicals to its licensed treaters. Hickson Corporation shall establish the standards for treating, processing, kiln drying, testing and quality control for the FRTW and Hickson Corporation shall monitor compliance of its licenses with the standards.

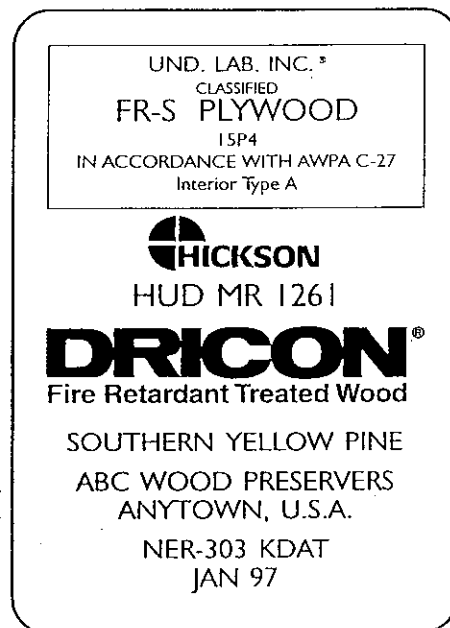
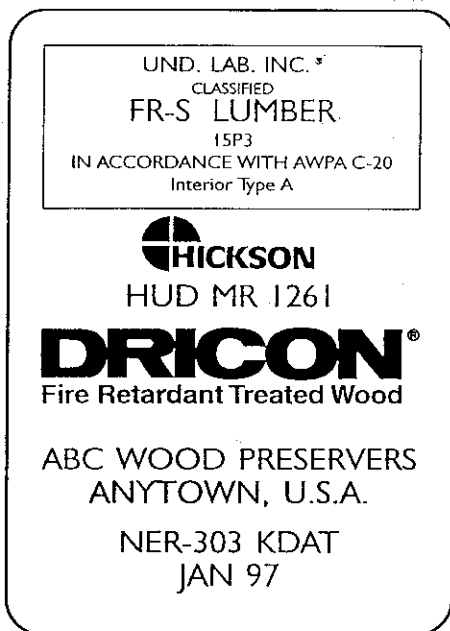
Dricon FRTW shall be produced under the Follow-Up Service of Underwriters Laboratories, Inc. to assure compliance with File No. 2805, Volume 9 for lumber and File No. 3718, Volume 5 for plywood. Quality assurance records shall be made available for inspection by HUD upon request.

CERTIFICATION AND PANEL MARKING:

Hickson Corporation shall certify that the Dricon FRTW conforms to the requirements of this Materials Release (MR). Hickson Corporation shall certify that the face and back plies of the treated plywood are Southern Pine or Douglas Fir. Hickson Corporation shall mark each panel with the species of the face and back or provide a certificate with each pallet which certifies the species of the face and back. Each piece of lumber and plywood certified as conforming to this MR shall be marked with the following information:

- a. Hickson Corporation
- b. Dricon Fire Retardant Treated Wood.
- c. Underwriters Laboratory, Inc., classified FR-S Lumber 15P3 in accordance with AWPA C-20, Interior Type A or classified FR-S plywood 15P4 in accordance with AWPA C-27, Interior Type A.

- d. KDAT (Kiln Dried After Treatment).
- e. Month and year of treatment.
- f. Plant identification number or name of treating company and plant location.
- g. HUD MR 1261a.



WARRANTY:

Hickson Corporation warrants Dricon Fire Retardant Treated Wood to be free of any defects due to faulty materials and workmanship in the manufacturing process for a period of 20 years from the date of installation.

The liability of Hickson Corporation under this warranty shall be limited to replacement of defective materials and the cost of installation or at the option of Hickson Corporation, payment in lieu thereof.

This warranty is limited and applies to any material failure due to manufacturing only and does not cover nor will the manufacture be liable for any defects or damages due to misuse, improper storage, lightning, or other caused beyond the manufacturer's control.

The manufacturer's warranty does not relieve the builder, in any way, of responsibility under the terms of the Builder's Warranty required by the National Housing Act or under any provisions applicable to any other housing program. A copy of the manufacturer's warranty shall be furnished by the builder to the homeowner.

MANUFACTURER'S RESPONSIBILITIES:

Issuance of this MR commits the manufacturer to fulfill, as a minimum, the following:

1. Produce, label and certify the material, product or system in strict accordance with the terms of this MR.
2. Provide necessary corrective action in a timely manner for all cases of justified complaint, poor performance or failure reported by HUD.
3. When requested, provide the Office of Consumer and Regulatory Affairs, Manufactured Housing and Standards Division, HUD Headquarters, with a representative list of properties, in which the material, product or system has been used, including complete addresses or descriptions of locations and dates of installation.
4. Inform HUD in advance of changes in production facilities, methods, design of the product, company name, ownership or mailing address.

EVALUATION:

This MR shall be valid for a period of three years from the date of initial issuance or most recent renewal or revision, whichever is later. The holder of this MR shall apply for a renewal or revision 90 days prior to the Review Date printed on this MR. Submittals for renewal or revision shall be sent to HUD Headquarters. Appropriate User Fee shall be sent to:

U.S. Department of Housing and Urban Development
Technical Suitability of Products Fees
P.O. Box 954199
St. Louis, MO 63195-4199

The holder of this MR may apply for revision at any time prior to the Review Date. Minor revisions may be in the form of a supplement to the MR.

Where the Department determines that a proposed renewal or supplement constitutes a revision, the appropriate User Fee for a revision will need to be submitted in accordance with Code of Federal Regulations 24 CFR 200.934, "User Fee System for the Technical Suitability of Products Program," and current User Fee Schedule.

CANCELLATION:

Failure to apply for a renewal or revision shall constitute a basis for cancellation of the MR. HUD will notify the manufacturer that the MR may be canceled when:

- 1) conditions under which the document was issued have changed so as to affect production of, or to compromise the integrity of the accepted material, product or system,
- 2) the manufacturer has changed its organizational form without notifying HUD, or
- 3) the manufacturer has not complied with responsibilities it assumed as a condition of HUD's acceptance.

However, HUD will give the manufacturer a written notice of the specific reasons for cancellation, and the opportunity to present views on why the MR should not be canceled. No refund of fees will be made on a canceled document.

This Materials Release is issued solely for the captioned
firm, and is not transferable to any person or successor
entity.
